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Curran et al.

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(54) **CONTROLLER FOR AN ACOUSTIC
STANDING WAVE GENERATION DEVICE IN
ORDER TO PREVENT CLOGGING OF A
FILTER**

(71) Applicant: **Smith & Nephew PLC**, London (GB)

(72) Inventors: **Stephen John Curran**, York (GB);
Jonathan Nicholas Ridgway, York
(GB); **Pei-Sheng Chen**, York (GB);
Michael Pratt, London (GB); **Marc
Tanner**, London (GB); **Stephen
Latham**, Sun Prairie, WI (US); **Nick
Reback**, Madison, WI (US)

(73) Assignee: **Smith & Nephew PLC** (GB)

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CPC **B01D 29/70** (2013.01); **B01D 35/1435**
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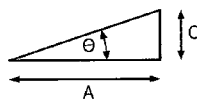
Primary Examiner — Fred Prince

(74) *Attorney, Agent, or Firm* — Burns & Levinson LLP;
Joseph M. Maraia

(57) **ABSTRACT**

The invention relates to a method and apparatus to continu-
ously monitor and control acoustic energy and vacuum
pressure to maintain a net unidirectional flow of multi-phase
heterogeneous fluids through a porous filter or membrane.
The heterogeneous fluid may come from a variety of sources
including biological sources such as, blood, bone marrow
aspirate (BMA), adipose tissue (lipoaspirate), urine, saliva,
etc.

10 Claims, 28 Drawing Sheets



θ =Tilt angle
O =Length of relaxed spring - compressed spring
A =Distance between the hinge and the spring

